



River Publishers Series in Power

## Optimizing vehicular power in high-congested VANETS environment

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### Description:

The book focuses on using artificial intelligence (AI) techniques to optimize the loss of power in vehicles that occurs because of congestion in the VANET environment. Power consumption management requires integration with novel techniques and technologies for enhancement. In the congested Vehicular ad-hoc networks (VANETs) environment, most vehicles lose their energy, or the power efficiency of the vehicles is degraded. To optimize the vehicles' power performance, and deliver reliable energy production, the most effective techniques, algorithms, and AI approaches are being employed. The vehicles' optimization of power can be easily improved effectively by applying machine learning techniques.

The book presents a realistic introduction to the problems of power management faced by vehicles in a highly congested VANET environment and solves these by optimizing the vehicles' power performance through use of the new AI techniques. It will also assist the vehicles in predicting and forecasting the power lost in the congested VANET environment.

Technical topics discussed in the book include:

- Introduction to vehicles in congested VANET environments
- Description of power and energy in vehicles
- AI optimizing algorithms
- Optimizing the power of vehicles using AI
- Parameters used for optimizing vehicular power
- Applications of VANETs
- Real-time scenarios to apply in the future for vehicular power

**Keywords:** VANETs, Power, Energy, Vehicles, Power Electronics, Artificial Intelligence, Machine Learnings, Communication, Networking, Power Energy